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formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby to drive said charged particles from the aerosol and deposit said charged particles as oppositely charged layers on said dielectric substrate thus forming a built-up deposit.

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- 3. (Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said aerosol particles are charged.
- 4. (Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said aerosol particles comprise particles of dry powder.

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- 5. (Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said aerosol particles comprise liquid droplets.
- 8. (Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said aerosol particles comprise a pharmaceutical.

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TEL, 520,882,7623 FAX 520,882,7643 14. (Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region

proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said alternating electric field has a magnitude between 1 kV/cm and 30 kV/cm.

- 15. (Amended) The method according to claim 14, wherein said alternating electric field has a frequency of between 1 Hz and 100 kHz.
- 16. (Twice Amended) The method according to claim 14, wherein said alternating field has a duty cycle different than 50%.

18. (Amended) The method according to claim 14, wherein said alternating electric field is formed between a first electrode positioned at an end of said deposition zone opposite to and facing said dielectric substrate and a second electrode in contact with said dielectric substrate on the opposite side of where said deposit is formed.

22. (Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric

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substrate thus forming a built-up deposit, wherein substantially all of said aerosol particles are removed from said aerosol to form said deposit.

- 23. (Twice Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein the gas of said aerosol is selected from the group consisting of air, nitrogen, and nitrogen/carbon dioxide mixtures.
- the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said dielectric substrate comprises a packaging

25. (Amended) A method for depositing particles onto a dielectric substrate comprising

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- 28. (Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said dielectric substrate comprises a pharmaceutical carrier.
- 29. (Twice Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said dielectric substrate comprises a carrier for carrying said deposit from said deposition zone to a location remote from said deposition zone for further processing.
- 30. (Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting

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aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said dielectric substrate is edible.

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48. (Twice Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby to drive said particles from the aerosol and deposit said charged particles as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode.

49. (Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said particles comprise a solid or a liquid.

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- 51. (Amended) The method according to claim 49, wherein said particles comprise carrier particles coated with a bioactive agent.
- 52. (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereav said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said particles comprise a pharmaceutical.
- 53. (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said aerosol carrier is nitrogen gas.
- 54. (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said substrate comprises a blister pack.

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55. (Twice Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said substrate comprises an electrically insulating material.

- 56. (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said substrate is comprised of an electrically conducting material.
- 57. (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate sand said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of appositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said electrically charging means employs a corona wire or corona emitting points.

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59. (Thrice Amended) A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the

resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said electrically charging means includes a charge source comprising a solid dielectric member, a first electrode in contact with one side of said solid dielectric member, a second electrode in contact with an opposite side of said dielectric member, with an edge surface of said second electrode disposed opposite said first electrode to define an air region at the junction of said edge surface and said solid dielectric member, and means for applying an alternating potential between said first and second electrodes to induce ion producing electrical discharges in the air region between the dielectric member and the edge surface of said second electrode.

60. (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said electrically charging means includes triboelectric charging of said aerosol particles or induction charging of said aerosol particles.

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- 63. (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said aerosol particles are charged within said deposition region.
- 64. (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said electrically alternating field has a magnitude between about 1 kV/cm and about 30 kV/cm.
- 65. (Amended) The method according to claim 64, wherein said electrically alternating field has a frequency of oscillation between about 1 Hz and 100 kHz.
- 66. (Amended) The method according to claim 64, wherein the duty cycle of the alternating field is adjusted to provide maximum efficiency of said particle deposition.
- 67. (Amended) The method according to claim 64, wherein said electrically alternating field is formed between a first electrode positioned at one side of said deposition region opposite and facing said substrate and a second electrode contiguous to said substrate.

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69 (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second

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region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein the pattern of deposited material is defined by an electrically conducting mask disposed adjacent said charging means.

- 70. (Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein the aerosol particle mass flow is monitored whereby the mass of deposited particles is controlled.
- 71. (Twice Amended) A method for depositing particles onto a surface of a substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein multiple deposits are made using multiple deposition regions supplied from a single aerosol source by multiplexing the application of the alternating deposition field between the deposition regions.

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